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Legislative Audit Division

State of Montana

Report to the Legislature

October 1999

Information System Audit

Montana Lottery Security

Department of Commerce

This report provides information regarding the security controls at the Montana State Lottery. It includes recommendations for improving controls over access to computer system data and validation of winning tickets.

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Members of the IS audit staff hold degrees in disciplines appropriate to the audit process. Areas of expertise include business, accounting, and finance.

IS audits are performed as stand-alone audits of IS controls or in conjunction with financial-compliance and/or performance audits conducted by the office. These audits are done under the oversight of the Legislative Audit Committee which is a bicameral and bipartisan standing committee of the Montana Legislature. The committee consists of six members of the Senate and six members of the House of Representatives.

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Legislative Audit Division

Information System Audit

Montana Lottery Security

Department of Commerce

Members of the audit staff involved in this audit were Ken Erdahl, Wendy Kittleson, and Rene Silverthorne.

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October 1999

The Legislative Audit Committee
of the Montana State Legislature:

This report provides information regarding the security controls at Montana State Lottery. This report contains recommendations for improving controls over access to computer system data and validation of winning tickets. Written responses to our audit recommendations are included in the back of the audit report.

We wish to express our appreciation to the staff of the Montana State Lottery for their cooperation and assistance.

Respectfully submitted,

Scott A. Seacat
Legislative Auditor

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		Residence
Montana Lottery Commission	Becky Erickson, Chair	Glasgow
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Montana Lottery	Jerry LaChere, Lottery Director	
	L. John Onstad, Director of Security	
	Leslie Darfler, Director of Operations	

Introduction

State law requires the Legislative Audit Division to conduct a comprehensive audit of all aspects of security in the operation of the lottery every two years. This is the fifth security audit completed since the Lottery's inception in 1987.

Section 23-7-411, MCA, specifies those areas of Lottery operations the Legislative Audit Division must evaluate to determine if controls exist which ensure the security over these areas. These areas include:

- Personnel security.
- Lottery sales agent security.
- Lottery contractor security.
- Ticket validation/counterfeiting.
- Drawing security.
- Lottery premises/warehouse security.
- Ticket distribution security.
- Instant game ticket delivery/storage.
- Unclaimed prizes.
- Computer Security.

Conclusion

Security controls are in place to ensure overall security of Lottery operations, except for weaknesses identified which relate to computer security and ticket validation procedures.

Prior Audit Recommendations

Our 1996 security audit report contained one recommendation to establish a formal process to ensure security personnel approve and periodically review contractor access rights to Lottery applications. In March 1999, the new contractor's system replaced the previous systems. We determined that contract employees high level access to management system data is not monitored by the Lottery.

Validation Procedures for Mailed-in Tickets

Players mail tickets to the Lottery to determine if tickets purchased include winning tickets. The Lottery validates the tickets received and notifies the player of non-winning tickets, or prepares checks for winners. We determined that procedures for tracking tickets need to be improved to ensure no tickets are lost or stolen once they are received by the Lottery.

Computer Security

Network security controls define the data a user can access through the network. We identified one user with inappropriate access. Procedures should be in place to periodically review network access, and high levels of access should be restricted to appropriate personnel.

The Game Management System (GMS) provides management information to the Lottery for on-line and instant games. We determined that access levels granted for three Lottery employees were inappropriate based on the employees daily job duties. High levels of access increase the risk of making inappropriate changes to ticket information.

Pre-established passwords were assigned to Lottery personnel to access GMS. Lottery employees must continue to use these passwords to access GMS. State policy states that passwords should be changed every 60 days. We recommended that the Lottery enable the function requiring users to make periodic password changes.

Chapter I - Introduction

Introduction

State law requires the Legislative Audit Division to conduct a comprehensive audit of all aspects of security in the operation of the lottery every two years. This is the fifth security audit completed since the Montana State Lottery's (Lottery) inception in 1987.

Audit Objectives

Our primary objective was to evaluate whether security controls exist over the areas defined in state law. Section 23-7-411, MCA, requires that the audit include the following:

(a) Personnel security.
(b) Lottery sales agent security.
(c) Lottery contractor security.
(d) Security of manufacturing operations of lottery contractors.
(e) Security against ticket or chance counterfeiting and alteration and other means of fraudulently winning.
(f) Security of drawings among entries or finalists.
(g) Computer security.
(h) Data communications security.
(i) Data base security.
(j) Systems security.
(k) Lottery premises and warehouse security.
(l) Security in distribution.
(m) Security involving validation and payment procedures.
(n) Security involving unclaimed prizes.
(o) Security aspects applicable to each particular lottery game.
(p) Security of drawings in games whenever winners are determined by drawings.
(q) The completeness of security against locating winners in lottery games with preprinted winners by persons involved in their production, storage, distribution, administration, or sales.
(r) Any other aspects of security applicable to any particular lottery game and to the lottery and its operations.

Audit Scope and Methodology

The audit was conducted in accordance with governmental auditing standards published by the United States General Accounting Office. We evaluated all aspects of security over the Lottery operations as required by state law. We also followed up on the implementation status of the prior audit recommendation regarding contractor access to the Lottery's computer systems.

Effective March of 1999, Autotote Lottery Corporation replaced Automated Wagering International (AWI) as the contractor to provide the Lottery with computer services for on-line games. Retailers use Autotote terminals to sell lottery tickets and perform ticket validations for both on-line and instant games. Lottery personnel use the Game Management System (GMS) to manage on-line and instant game information, retailer files, and instant ticket inventory. We reviewed security controls over Autotote systems, observed processes performed by GMS, and interviewed Autotote and Lottery personnel regarding changes in procedures.

We performed a number of steps to evaluate the security over the Lottery's operations. We reviewed Lottery security policies and procedures, Multi-State Lottery Association game requirements, Montana Cash drawing procedures, and computer system documentation. We also reviewed Lottery employee and retailer security files.

We evaluated security over the Lottery building, warehouse, and Autotote facilities. Oberthur Gaming, Inc., located in San Antonio, Texas, prints all of the Lottery's instant tickets. We visited the Oberthur Gaming facility and evaluated their instant ticket production process, physical security of the facility, and security over ticket distribution to Montana. We also reviewed security over the Lottery's distribution of instant tickets shipped to retailers via United Parcel Service (UPS).

Compliance

We reviewed compliance with state laws and administrative rules which relate to the Lottery security operations. We did not identify any instances where the Lottery was not in compliance with these laws and administrative rules.

During the audit period, AWI filed a lawsuit against the Montana Lottery for awarding Autotote the seven-year contract for providing Lottery services. AWI contended that the Lottery did not follow state purchasing procedures during the bidding process. Montana Lottery paid $500,000 to AWI to settle the lawsuit out of court, of which $150,000 is reimbursed by Autotote.

Chapter II - Background

Introduction

In November 1986, the people of Montana passed Legislative Referendum 100 establishing a state lottery. Lottery ticket sales began on June 24, 1987, with an instant scratch game. Lottery now offers approximately twelve scratch games and four on-line games.

Lottery Commission

The Lottery Commission consists of five members appointed by the Governor. One commissioner must have a minimum of five years law enforcement experience, one must be an attorney licensed in Montana, and one must be a certified public accountant licensed in Montana. The two remaining commissioners are public members. The Commission meets with the Lottery director quarterly to set policy, determine the types of games to offer, and review Lottery activities and operations.

Lottery Organization/Responsibilities

The Montana Lottery is attached to the Department of Commerce for administrative purposes and is authorized a total of 31.5 FTE. The Lottery's administrative function includes the Lottery director appointed by the Governor, and four other employees. The remaining employees are located in the Operations Division, Marketing and Sales Division or Security Division.

Operations Division

The Operations Division is responsible for the Lottery's accounting and fiscal management. This includes establishing Lottery budgets, monitoring ticket sales, validating winning tickets, and administering data processing operations.

Marketing and Sales Division

The Marketing and Sales Division is responsible for designing and managing Lottery games, researching and analyzing Lottery sales, selling instant game tickets to retailers, and promoting the Lottery.

Security Division

The Security Division performs background investigations on all employees and retailers, ensures tickets are produced and printed in compliance with established security measures, and directs investigations of alleged Lottery fraud or theft. The division also monitors drawings, validates high-tier winning tickets, establishes

security policies and procedures for new games designed by the Lottery, and monitors the security of the Lottery computer systems.

Lottery Games

Revenue from instant and on-line ticket sales fund Lottery operations. (See Appendix A on page 17 for information regarding Lottery Revenues and Expenditures for fiscal years 1996 through 1998.) The following sections describe Lottery games offered.

Instant Scratch Games

Instant games were the first games offered by the Lottery. Players determine if they are winners by scratching off the play areas of the ticket. If the player uncovers an established number of like symbols or dollar amounts, the ticket is a winner.

In March 1999, Autotote's Advanced Entertainment and Gaming Information System (AEGIS) was implemented. AEGIS allows retailers to cash any instant tickets up to $250 regardless of where the ticket was purchased, and automatically validates winning tickets. Retailers sell many different types of scratch games, with varying prize structures based on the game played.

Oberthur Gaming prints the instant tickets and ships them to Lottery headquarters. The Lottery inspects the shipment to ensure all tickets are present, the latex covering is free from scratches, play symbols are covered by latex, and the general appearance of the ticket is good. The Lottery then distributes tickets to retailers, via UPS, for sale to the public.

On-line Games

On-line games offer players a chance to win larger prizes than can typically be won on instant games. The following paragraphs describe the four on-line games offered by the Lottery.

Powerball

Ticket sales for Powerball began in April 1992. Powerball is a multi-state lotto game offering smaller states the opportunity to provide larger jackpots than they could offer through a single state lotto game. The Montana Lottery currently participates in Powerball with 19 other states and the District of Columbia.

To participate in Powerball, the Lottery must be a member of the Multi-State Lottery Association (MUSL) which is headquartered in Des Moines, Iowa. MUSL administers operations for Powerball, and the Lottery must comply with MUSL rules and game procedures.

The game allows players the chance to win a minimum jackpot of $10 million. A player must match all five numbers and the Powerball to win the jackpot. The jackpot progressively grows if the six numbers are not matched. The odds of winning the jackpot are 1 in 80 million, and the overall odds of winning a prize are 1 in 35. Players can win between $3 and $100,000 for matching less than all six numbers.

Drawings are held at MUSL headquarters in Des Moines on Wednesday and Saturday evenings. The drawings are monitored to ensure the security and integrity of the drawings. Independent audit firms, contracted by MUSL, observe drawing procedures performed by MUSL, and balancing procedures performed by each MUSL member, including the Montana Lottery.

Montana Cash

Montana Cash is an on-line game offered only in Montana since May of 1991. The game offers players a chance to win a guaranteed minimum jackpot of $20,000 by matching five numbers from a field of 37. Players can also win $200 for matching four out of five numbers, and $5 for matching three. The odds of winning the jackpot are 1 in 217,949 and overall odds are 1 in 43.

Montana Cash drawings are held each Wednesday and Saturday evening at Montana Lottery headquarters. Independent auditors, under contract with the Legislative Audit Division, monitor the drawings to ensure the integrity and security of the drawing process.

Wild Card

Wild Card is a multi-state game introduced in February 1998, and played in Montana, Idaho, and South Dakota. The game allows players the chance to win a jackpot with a guaranteed minimum of $100,000. Players select 5 numbers from a field of 31, and a wild

card from a field of 16. The player must match all five numbers and the wild card to win the jackpot. Also, players can win prizes ranging from $1 to $5,000 by matching less than all five numbers and/or the wild card. Overall odds are approximately 1 in 6. Drawings are held each Wednesday and Saturday night in Des Moines in conjunction with the Powerball drawing.

Cash 4 Life

The Cash 4 Life game began sales in March 1998. Cash 4 Life is a multi-state game which allows players the chance to win $1,000 a week for life. The Montana Lottery currently participates in Cash 4 Life with nine other states and the District of Columbia. A player must match all four numbers from a field of 100 to win the jackpot. Other prizes range from $1 to $100,000. Drawings are held every evening in Des Moines. The odds of winning the jackpot are 1 in 3,921,225, and the overall odds of winning are 1 in 9.9.

Retailers

As of May 1999, there were 645 retailers licensed to sell and redeem instant lottery tickets for the Montana Lottery. Of these, 376 are also authorized to sell and redeem on-line tickets. Before retailers are licensed, they are subject to a statutory background investigation by Lottery's Security Division.

Computer Operations

Autotote administers data processing activities for both on-line and instant tickets from a data processing center located in Helena. Autotote's computer operations provide a centralized computer system to track transactions initiated from retailer terminals.

Instant Scratch Game Operations

The Advanced Entertainment and Gaming Information System (AEGIS) allows retailers to validate instant tickets by scanning a bar code on the ticket that instantly verifies whether the ticket is a winner and amount of the prize. AEGIS is responsible for a number of functions including: security over the movement and activation of instant tickets, automated accounting and reporting, and validation of tickets up to $250 at any retailer in the state.

On-line Game Operations

AEGIS also processes transactions for the Lottery's four on-line games. AEGIS monitors, stores, and compiles ticket sales information such as the number of tickets sold for each game, the numbers printed on each ticket, and the date and time of the purchase. The lottery operates the Internal Control System (ICS) at its headquarters, which is used to verify the accuracy of Autotote ticket sales information. ICS data is matched against Autotote data during the drawing process to verify the numbers of tickets sold per game, the numbers selected during the drawing, and the number of winning tickets for each game.

On-line game tickets are printed from terminals at retailer establishments. The terminals are connected via communication lines to Autotote's data processing center in Helena. Players can choose their own numbers to play or have the terminal randomly select the numbers. Autotote is responsible for the maintenance and installation of retailer terminals located throughout the state. An Autotote subcontractor delivers on-line ticket stock to retailers.

Game Management System

The Game Management System (GMS) is a component of AEGIS which provides management information to the Lottery for both on-line and instant games. GMS provides the Security Division the ability to see if a ticket has been claimed, to review high-tier winning tickets, and manage warehouse inventory. The Operations Division uses GMS to obtain sales reports, manage accounting information, validate winning tickets, and track ticket claims. GMS allows the Marketing and Sales Division to maintain retailer information, submit retailer orders for instant games, and track the status of instant tickets sold.

Chapter III - Security Controls

Introduction

State law requires the Lottery to maintain a high degree of security over its operation and games. The following sections discuss the status of the prior audit recommendation, recommendations for improving controls, and existing security controls over Lottery operations.

Contractor Access to GMS

The previous audit report contained one recommendation to improve security over computer operations at the Lottery. The recommendation addressed access controls. We recommended that the Lottery approve contractor employee access rights to Lottery applications based on employee position descriptions, and review the reasonableness of access rights on a periodic basis. This control was important because of the potential to manipulate retailer and game files.

In March 1999, Autotote systems replaced the previous system. Therefore, we reviewed procedures for monitoring current contractor access to GMS data and files. We identified eight contract employees that are granted full change access to all data. Lottery security was unaware of specific contract employees assigned this high level access. This access allows users to change game information. Autotote personnel stated the access is necessary to allow them to correct errors as they occur.

Unlimited access increases the risk of unauthorized changes to game data. Currently, Lottery personnel do not monitor changes made by contractors to ensure appropriateness. Autotote could make an electronic log available which Lottery personnel can use to monitor changes made by contract employees.

Recommendation #1

We recommend the Montana Lottery establish procedures to monitor changes made by contract employees to the management system data files.

Security Involving Validation and Payment Procedures

On-line winning tickets worth more than $599, and instant tickets over $250, must be claimed by either mailing or hand-delivering the ticket to the Lottery headquarters. On-line tickets worth $5,000, or more, require a more thorough investigation. We observed the validation process for different types and brackets of winning tickets.

Validation Procedures for Mailed-in Tickets

Players may mail tickets to the Lottery when the ticket could not be claimed at the retailer, the player lives out-of-state, or to determine if groups of tickets purchased include a winner. Two people observe the opening of mail and separate the tickets based on type and status.

Non-winning tickets require a notification letter to the purchaser. Winning tickets require validation and preparation of checks. Security personnel review damaged or suspicious tickets. Although the number of envelopes opened are recorded, accountability for the number of tickets received per envelope is not tracked.

Once the tickets are separated, there is no trail of the number of tickets given to the next employee. During the audit, an employee preparing letters to inform purchasers of non-winning tickets found winning tickets in the batch. There is a risk that an employee could remove a winning ticket and cash it through a retailer, where identification is not required. An audit trail should document the receipt and validation of all tickets to ensure no tickets are lost or stolen.

Recommendation #2
We recommend the Montana Lottery improve procedures to track all tickets received through the mail.

Computer Security

Computer security controls protect both the hardware used to support processing functions and the data maintained on the system. We reviewed physical security controls over Autotote's data processing center and back-up site. Facility access is restricted to Autotote employees, and monitoring equipment is installed to detect environmental hazards.

Network Security

The Lottery maintains a network to link its employees and computer systems. Network security controls define the data a user can access. Supervisory access rights should be limited to personnel responsible for maintaining the network. We reviewed users at the network administrative level assigned supervisory rights and found one user ID assigned inappropriate access.

The Lottery was unable to explain who was assigned access to the ID, or why they had that level of access. Supervisory rights allow the ability to access and change the data of any user on the Lottery's network. The user account was active and was used in April 1999 to access the network. However, we were not able to determine what was accessed, or by whom. Furthermore, a password was not required for the user so anyone accessing the system with the user ID would obtain the same open access.

When called to their attention, Lottery personnel immediately deleted the user ID from its network. Procedures should be in place to periodically review access, and high levels of access should be restricted to appropriate personnel.

Recommendation #3
We recommend the Montana Lottery periodically review network access rights to ensure access is appropriate based on user job duties.

GMS User Access

User access groups established for Lottery personnel define the type of functions the user can perform on the system. During implementation, a "super user" group was set up to allow full access for three Lottery employees. The access granted is greater than that needed to perform daily job duties. Unlimited access increases the risk of making inappropriate changes to ticket information.

Accounting errors occurred because an employee with super user access processed transactions without understanding the impact on financial records. For example, a pack of instant tickets was activated twice causing the Lottery's receivables to be posted more

than once. Lottery accounting personnel identified and corrected the errors.

Lottery personnel acknowledge that only two of the three employees periodically need access through the super user profile. The Lottery has requested to have a separate user profile set up for the users to perform daily duties. Lottery employees would only have to access GMS through the super user profile under specific circumstances.

Recommendation #4

We recommend the Montana State Lottery ensure employees are assigned user group profile access that is appropriate based on the employee's job duties.

GMS Password Security

Log on passwords provide identification and authentication of the user before permitting access. The subcontractor assigned pre-established passwords to Lottery personnel. Lottery employees continue to use these assigned passwords to access GMS, and are not required to change their passwords on a periodic basis.

State policy states that passwords should be changed at least every 60 days. Knowledge of pre-assigned passwords increases the risk an employee could access the system through another user's password and assume the same rights as that user.

We discussed password security with the subcontractor and the Lottery, and they told us GMS can be set up to require periodic password changes, but will require system modifications. Lottery management should ensure access to information is restricted only to those individuals designated responsible.

Recommendation #5

We recommend Montana Lottery enable the function requiring the user to make periodic password changes, as required by state policy.

Security of Lottery Operations

The following sections discuss the areas of Lottery operations specified in section 23-7-411, MCA, where we identified security controls exist.

Personnel Security

State law requires Lottery security personnel to conduct background investigations of any new employees hired. The Lottery has developed specific investigation procedures for each employee hired, including obtaining fingerprints to process state and federal background checks. Any applicant convicted of a felony or gaming offense will not be considered for employment. Our audit found the Lottery performs background investigations on all employees it hires.

Lottery Sales Agent Security

Lottery security personnel perform background investigations on all retailers who sell Lottery tickets. Background investigations include gathering ownership information, background searches for outstanding warrants and a review of the retailer's credit history. The Lottery has established policies and procedures defining the application process and authorization required to make changes to retailer files. Our review determined this policy is followed.

Lottery Contractor Security and Security Over Manufacturing Operations

Oberthur Gaming Technology is located in San Antonio, Texas, and prints all of the Lottery's instant scratch game tickets. We visited Oberthur's ticket printing facility and found security controls are in place. We reviewed physical security controls, ticket printing procedures, and the security over tickets during the shipping process.

We also reviewed security over Autotote's data processing center in Helena and the back-up site in Montana City. Physical security controls are in place to prevent unauthorized access. Disaster recovery procedures were tested at the back-up site, but are not documented. Prior audits have recommended that the department document formal disaster recovery procedures. Autotote has not had the resources to document procedures with the recent implementation of the system. We will continue to review the progress of disaster recovery procedures in future audits.

Security Against Ticket Counterfeiting, Alteration, or Other Means of Fraudulently Winning

The Lottery follows established procedures to validate all high-tier winning tickets for both on-line and instant games. For example, Lottery security verifies the paper stock used and matches ticket information against the transaction recorded on GMS before issuing a check for a high-tier winner. Instant ticket stock is manufactured and tracked in a way to prevent the fraudulent creation of a ticket.

Lottery Premises and Warehouse Security

Security systems monitor access to all parts of the Lottery building and Lottery employees are only granted access to those areas of the building which are necessary to perform their job duties. Visitors to the Lottery are required to sign an entry/exit log and must wear an identification badge during their visit. The warehouse is restricted to personnel needing access to perform their job duties.

Instant Ticket Distribution Security

Oberthur Gaming delivers instant tickets to Lottery head-quarters via tractor/trailer. The trailer is locked with numbered seals, and Lottery security personnel verify the numbers to the bill-of-lading upon the trailer's arrival. Lottery personnel inventory all tickets and the tickets are stored behind a locked fence in the warehouse.

Instant tickets are shipped from the Lottery to retailers via United Parcel Service. GMS generates shipping labels and invoices based on retailer orders received. Two people verify the contents agree with invoices before sealing the package. Instant ticket packs are not available for sale until a retailer receives and activates the ticket pack through their terminal.

Security Involving Unclaimed Prizes

Each Lottery game has a closing date after which the holder of the ticket can no longer claim the prize. Each instant game has a specified ending date. On-line game prizes must be claimed within six months after the drawing. When the time limit expires, unclaimed tickets are automatically purged from the system and can no longer be cashed. Lottery personnel verify the amounts of unclaimed prizes, and return the funds to the state General Fund.

Drawing Security

Lottery procedures define specific steps that must be completed in the on-line drawing process. Independent auditors and/or off duty police officers monitor drawings. In addition, several pretests of drawing equipment take place before the actual drawings to ensure the equipment is operating appropriately. Controls are in place to ensure ticket sales are closed prior to the drawing, and a ticket can not be generated after the winning numbers are selected.

Conclusion

We conclude security controls are in place to ensure overall security of Lottery operations, except for weaknesses identified which relate to computer security and ticket validation procedures.

Montana Lottery Revenue and Distribution
Fiscal Years 1996 through 1998

	FY 1996	FY 1997	FY 1998
Instant Games	$ 6,331,627	$ 6,063,023	$ 7,747,761
On-line Games	25,429,787	22,134,337	22,027,399
Other	210,310	301,494	337,465
Prior-period Adjustment	47,460	0	(65,976)
TOTAL	$ 32,019,184	$ 28,498,854	$ 30,046,649
Expenditures			
Instant Ticket Prizes	$ 3,525,849	$ 3,523,744	$ 4,628,726
On-line Ticket Prizes	12,388,451	10,808,835	10,610,680
Commissions	1,765,565	1,545,518	1,731,700
Ticket Costs	3,294,622	3,010,414	3,396,688
Operations	3,241,635	3,007,083	3,056,582
State General Fund	7,803,062	6,603,260	6,622,273
TOTAL	$ 32,019,184	$ 28,498,854	$ 30,046,649

Source: Compiled by the Legislative Audit Division from contract auditor reports.

Agency Response

October 1, 1999

Ms. Rene Silverthorne
Information Systems Auditor
Legislative Audit Division
State Capitol Building
Helena, MT 59620-1705

Dear Ms. Silverthorne:

Thank you for the opportunity to respond to the report on Montana Lottery Security.

The Montana Lottery agrees with the audit findings and recommendations. We will take the necessary action to comply with all recommendations. Through the audit process, we found areas where strengthening our current practices will improve the security of our operation.

The following is our response to specific recommendations of your audit team.

Recommendation #1

We recommend that the Montana Lottery establish procedures to monitor changes made by contract employees to the management system data files.

We concur with your recommendations, and will establish procedures to monitor changes made by contract employees to the management system data files. These procedures will be in place no later than March 2000.

Recommendation #2

We recommend the Montana Lottery improve procedures to track all tickets received through the mail.

We concur with your recommendation and will develop procedures to track all tickets received through the mail. These procedures will be in place no later than January 2000.

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Recommendation #3

We recommend the Montana Lottery periodically review network access to ensure access is appropriate based on user job duties.

> We concur with your recommendation and will periodically review network access to ensure access is appropriate based on user job duties. This periodic review will begin no later than October 1999.

Recommendation #4

We recommend the Montana State Lottery ensure employees are assigned user group profile access that is appropriate based on the employee's job duties.

> We concur with your recommendation and will ensure that employees are assigned user group profile access that is appropriate, based on the employee's job duties. This change will take place no later than December 1999.

Recommendation #5

We recommend the Montana Lottery enable the function requiring the user to make periodic password changes, as required by state policy.

> We concur with your recommendation and will establish a function requiring the user to make periodic password changes as required by state policy. This function will be enabled no later than December 1999.

Thank you again for the opportunity to respond. We hope that we can count on you and the resources of your office to answer questions and provide additional information. We greatly appreciate the constructive manner in which this audit was conducted. If you have questions regarding any of our comments, please don't hesitate to contact me.

Respectfully submitted,

L. John Onstad
Director of Security

cc: Jerry LaChere, Director